

CANAL HEARING DEVICE WITH TUBULAR INSERT

Abstract of the Disclosure

A canal hearing device with a dual acoustic seal system for preventing feedback while minimizing occlusion effects. The two-part device comprises a main module and an elongated tubular insert for conducting sound to the tympanic membrane and sealing within the bony region of the ear canal. The main module is positioned in the cartilaginous portion of the ear canal. The tubular insert comprises a sound conduction tube and a cylindrically hollow primary seal medially positioned in the bony region. The device also comprises a secondary seal laterally positioned in the cartilaginous region. The secondary seal, although providing additional acoustic sealing for the prevention of feedback, is sufficiently vented to provide a path of least acoustic resistance for occlusion sounds within the ear canal. In a preferred embodiment, the tubular insert comprises a coiled skeletal frame to provide high radial flexibility while maintaining sufficient axial rigidity for comfortable, kink-resistant, and consistent placement within the ear canal.

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